

7 March 2001

## MODIS sensor Working Group (MsWG) Discussion

### Agenda

- Updates
  - SWIR sub-frame differences & B 26 stripes
    - Testing with SRCA accomplished Friday, 2 March; DAAC processed L1B, but L1A not yet where MCST can get it; it is on order
  - ~~Saturation Metadata: Toller/Rogers; what currently available in granule metadata: Closed~~
  - RSB degradation
    - Discussion draft no later than 7 March meeting; email comments welcome; discussion 14 March
  - Reset of B5 gains: being scheduled likely 09 March; up 25%
  - Gain/bias PV LWIR FPA - Roger Drake: no silver bullet here, but charts still would be helpful
  - LUTs for 2000/063 released; April, SAFARI and full year still waiting
    - Studies on SWIR, MISR (MS1/MS2), concerns on BB & RSR by channel still active and likely will not be ready at start of April for full year consistent processing
- Other designated items
- Go Around the Table

**Attendance:** Bruce Guenther, Jack Xiong, Gary Toller, Mike Roberto, Eric Vermote, Steve Platnik, Bill Barnes, Stuart Biggar, Eddie Kearns, Chris Mueller, Roger Drake, Zhengming Wan, Jim Young, Gwyn Fireman

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### Updates from Previous Meetings

- Reset of B5 gains: being scheduled likely 09 March; up 25%
- Steve asked if the gain change could be done during a day granule over the Western Pacific; Jack and Bruce will look into it.
- Gain/bias PV LWIR FPA
- Roger Drake sees no evidence of delamination on the LWIR FPA, but may request substantiating tests: ecal, PV and PC band ramps and bias sweeps. Band 34 became noisier after the August 2000 outgassing.
- LUTs for 2000/063 released; April, SAFARI and full year still waiting.

- The SWIR band thermal leak correction provides improvement over uncorrected data, so we should turn the correction ON for reprocessing.

### **Other Designated Items**

Discussion of Summary Emissivity Comparisons

### **Go Around the Table**

Stu indicated that U. Arizona is looking at a new, recent set of data from Railroad Playa to get vicarious calibration for the MODIS SWIR (B5-7). Chris Moeller asked to have the Band 26 (1.38 micron) band included, and Stu suggested such a comparison might not be meaningful due to uncertainty in water vapor corrections and low signal levels. Bruce suggested that U. Arizona folks consider using a MODIS product for water vapor for this correction.

Stu suggested that if no physical explanation for band 26 striping can be found, then one bad detector could be turned off.

Zhengming reported a balloon validation test over Lake Tahoe, held on February 27.

Steve emphasized that SWIR band problems are due not only to subframe differences but also to detector-to-detector striping. Striping is especially apparent in SAFARI data taken in August-September 2000, before the change to side B electronics.

Roger reported that Joe Walker has been investigating solar diffuser. Direct examination of the SDSM flight spare shows that the screen holes are barrel-shaped, not right circular cylinders as expected. Roger proposed an on-orbit test to establish a functional relationship between SDSM screen angle and transmittance. Such a test may be able to establish that the SDSM screen on FM-1 could be replaced or shimmed to eliminate screen modulations. Bruce asked that he write a memo justifying the test.

Bruce will contact Roger and Jim Young on March 15 to discuss RSR.